IRJE |Indonesian Research Journal in Education|Vol. 10| No. 1|March|Year 2026|

Digital gamification in higher education: Kahoot as a learning tool for Indonesian discourse

NURULANNINGSIH[1], ASTRIANA WULANDARI[2*], EDI SURYADI[3], FALINA NOOR AMALIA[4], ARYANTI AGUSTINA[5], AND ASTRI NOPI DAYANTI[6]

Abstract

This study examines university students' perceptions of Kahoot-based digital gamification in Indonesian discourse learning. As higher education increasingly integrates educational technology, gamified platforms such as Kahoot are widely adopted to enhance engagement and learning motivation. However, limited research has specifically examined its role in tertiary-level discourse learning in Indonesia. Employing a descriptive quantitative approach, this study involved 20 sixth-semester students from the Indonesian Language and Literature Education Program at Tridinanti University. Data were collected using a validated Likert-scale questionnaire and analyzed using descriptive statistics. The findings reveal predominantly positive perceptions across three dimensions: self-perception, interpersonal perception, and situational perception. Students reported increased motivation, participation, confidence, and classroom enjoyment. The results suggest that Kahoot supports interactive learning and fosters a more engaging academic environment. This study contributes to the growing body of research on digital gamification in higher education and offers pedagogical implications for technology-enhanced language instruction.

Keywords

Digital gamification, higher education, interactive learning, Kahoot application, student perception.

Article History

Received 16 October 2025
Accepted 11 February 2026

How to Cite

Nurulanningsih, N., Wulandari, A., Suryadi, E., Amalia, F. N., Agustina, A., & Dayanti, A. N. (2026). Digital gamification in higher education: Kahoot as a learning tool for Indonesian discourse. *Indonesian Research Journal in Education |IRJE|, 10*(1), 377-390. https://doi.org/10.22437/irje.v10i1.50953

[1] Universitas Tridinanti, Palembang, Indonesia
[2] Politeknik Negeri Sriwijaya, Palembang, Indonesia, Corresponding author: wulandariastriana@gmail.com
[3] Universitas Tridinanti, Palembang, Indonesia
[4] Universitas Tridinanti, Palembang, Indonesia
[5] Universitas Baturaja, Palembang, Indonesia
[6] Universitas Tridinanti, Palembang, Indonesia

Introduction

Indonesian language courses in higher education play a fundamental role in developing students' literacy competence, academic writing skills, and critical thinking abilities. These courses are not merely designed to enhance grammatical accuracy but also to strengthen students' capacity to analyze, evaluate, and construct meaningful discourse in academic and professional contexts (Yustinah & Hartono, 2023). Among the various components of Indonesian language instruction, discourse learning is among the most intellectually demanding. It requires students to comprehend textual cohesion and coherence, interpret context, and produce structured, analytically sound arguments. Consequently, discourse learning functions as a foundation for higher-order thinking skills in tertiary education.

Students often perceive discourse learning as abstract, complex, and cognitively demanding, despite its importance. Traditional lecture-based methods tend to emphasize theoretical explanation rather than interactive engagement, which may lead to passive classroom participation and reduced motivation. When students experience learning as monotonous or overly theoretical, their engagement and academic confidence may decline. In higher education, maintaining student engagement has become increasingly challenging, particularly in subjects that require intensive analytical reading and writing. Therefore, innovative pedagogical strategies are needed to transform discourse learning into a more engaging, interactive, and student-centered process.

The rapid development of digital technology has significantly reshaped educational practices worldwide. The integration of digital tools into classroom instruction has opened new possibilities for interactive learning and student engagement. Educational technology is no longer viewed as supplementary but as a strategic component in enhancing learning effectiveness (Morel & Spector, 2022). Gamification, the application of game elements such as points, competition, and feedback in non-game contexts, has emerged as a promising approach to increase motivation and participation in educational settings (Zainuddin et al., 2020). Gamified learning environments provide immediate feedback, foster competition, and create a more dynamic classroom atmosphere, thereby positively influencing students' cognitive and emotional involvement.

One of the most widely used gamification platforms in higher education is Kahoot. Kahoot is an interactive quiz app that allows instructors to design competitive learning activities accessible on smartphones, tablets, or computers. Its real-time response system, leaderboard features, and instant scoring mechanisms promote active participation and student engagement. Several studies have shown that Kahoot can enhance motivation, classroom interaction, and short-term knowledge retention (Farhane, 2025; Licorish et al., 2018). Furthermore, gamified tools such as Kahoot have been associated with improved classroom atmosphere and increased student confidence in responding to questions (Zhang & Yu, 2021).

Digital gamification has been shown to help students learn new words, master grammar, and understand what they read in language education settings (Dehganzadeh & Dehganzadeh, 2020). However, while existing studies frequently report positive outcomes, most focus on general language learning or specific linguistic skills rather than discourse learning. Discourse learning differs from vocabulary or grammar instruction because it

requires deeper analytical reasoning, contextual interpretation, and critical evaluation of texts. Consequently, it remains unclear whether gamification tools like Kahoot can effectively facilitate discourse-level learning in higher education environments.

In Indonesia, the acceleration of digital learning adoption—particularly after the COVID-19 pandemic—has encouraged universities to integrate online and blended learning technologies (Rahayu & Wirza, 2020). Although digital platforms are increasingly utilized, empirical research examining their pedagogical impact within specific academic domains remains limited. Research on Kahoot in Indonesian higher education has primarily examined students' general responses to digital quizzes (Permatasari et al., 2023; Rosdiana, 2019). These studies indicate positive student attitudes toward Kahoot as an assessment tool. Similarly, research conducted by Perdana et al. (2020) and Inggriyani and Putri (2025) found that gamification approaches increased enthusiasm and classroom participation among prospective teachers.

Despite these encouraging findings, several limitations remain. First, previous studies largely emphasize positive responses without analyzing perception through a structured theoretical framework. Second, limited research has specifically explored the use of Kahoot in discourse learning at the tertiary level. Third, many studies focus on measuring satisfaction or interest rather than examining multidimensional perception constructs, such as self-perception, interpersonal perception, and situational perception. Consequently, a more theoretically grounded investigation is necessary to understand how students interpret and evaluate gamified discourse learning experiences.

Student perception is a critical variable in evaluating instructional innovation. Perception is the cognitive process by which individuals interpret and assign meaning to experiences, based on internal beliefs and external stimuli (Shokirovna, 2023). In educational contexts, perception shapes motivation, engagement, and behavioral responses. Positive perceptions toward learning tools may enhance self-efficacy and participation, while negative perceptions may hinder learning effectiveness. Therefore, examining students' perceptions provides insight into how digital gamification influences both cognitive and affective dimensions of learning.

This study adopts Robbins and Judge's (2019) three-dimensional perception framework: self-perception, interpersonal perception, and situational perception. Self-perception refers to how students evaluate their abilities, motivation, and confidence during learning activities. Interpersonal perception concerns how students interpret social interaction, collaboration, and peer engagement within gamified activities. Situational perception relates to how students assess the learning environment created by Kahoot, including classroom atmosphere, comfort, and instructional innovation. By applying this framework, the present study seeks to provide a more comprehensive analysis of student responses to Kahoot-based discourse learning.

At Tridinanti University in Palembang, the use of Kahoot in Indonesian-language courses is relatively new. While preliminary classroom observations suggest increased student enthusiasm, systematic investigation is required to evaluate students' perceptions of this instructional innovation. Understanding how students perceive Kahoot in discourse learning is important for determining whether gamification supports deeper conceptual understanding or merely increases surface-level engagement.

Consequently, this study seeks to investigate university students' perceptions of Kahoot-based gamification in Indonesian discourse learning. Specifically, it analyzes

perception across three dimensions: self-perception, interpersonal perception, and situational perception. By doing so, this research contributes to the literature in several ways. First, it extends gamification research into the domain of discourse learning at the tertiary level. Second, it integrates a structured perception framework into the evaluation of digital learning tools. Third, it provides empirical evidence from the Indonesian higher education context, which remains underrepresented in international educational technology research.

In conclusion, as higher education institutions continue to integrate digital innovation into pedagogical practice, evaluating the effectiveness of gamification strategies becomes increasingly essential. Kahoot is a promising tool for enhancing interactive learning; however, its pedagogical value must be examined through theoretically grounded, empirically supported research. By investigating students' multidimensional perceptions, this study seeks to offer meaningful insights into the role of digital gamification in supporting discourse learning in Indonesian higher education.

Literature Review

Digital gamification in higher education

The integration of digital technology in higher education has significantly transformed instructional strategies and learning environments. Among these innovations, gamification has emerged as a pedagogical approach that incorporates game elements—such as points, competition, leaderboards, and instant feedback—into non-game educational contexts to enhance motivation and engagement (Zainuddin et al., 2020). Unlike traditional teaching methods that often rely on passive information delivery, gamified learning environments promote active participation and student-centered interaction.

Research indicates that gamification can positively influence students' cognitive, behavioral, and emotional engagement (Bond et al., 2020). By introducing competitive and reward-based mechanisms, gamification stimulates intrinsic motivation and increases one's sense of accomplishment. In higher education settings, where student engagement is often challenged by abstract and theoretical content, gamified approaches can create a more dynamic, stimulating learning environment.

Moreover, digital gamification aligns with constructivist learning theory, which emphasizes active knowledge construction through interaction and experience. Gamified platforms encourage students to actively participate in problem-solving and knowledge recall rather than passively receive information. Studies have shown that gamification improves academic performance, increases class attendance, and enhances participation (Toda et al., 2019). However, the effectiveness of gamification may vary depending on subject matter, instructional design, and student characteristics.

While numerous studies highlight the motivational benefits of gamification, limited research has explored its application in discourse-level language learning at the tertiary level. Discourse learning requires higher-order thinking skills, critical interpretation, and contextual analysis. Therefore, examining how digital gamification supports complex cognitive tasks remains an important area of investigation.

Kahoot as an interactive learning tool

Kahoot is one of the most widely adopted gamified learning platforms in higher education. As an interactive quiz-based application, Kahoot enables instructors to design real-time assessments accessible via smartphones, tablets, or computers. Its features—including timed questions, scoreboards, visual displays, and instant feedback—create a competitive yet collaborative learning environment.

Several empirical studies have documented the educational benefits of Kahoot. Licorish et al. (2018) found that Kahoot enhances classroom interaction and short-term knowledge retention. Similarly, Wang and Tahir (2020) reported, in a systematic review of Kahoot-based learning studies, increased student motivation, engagement, and enjoyment across various educational contexts. The platform's immediate feedback mechanism allows students to reflect on their responses, reinforcing memory and conceptual understanding.

In language education, Kahoot has been used to facilitate vocabulary acquisition, grammar practice, and reading comprehension (Korkmarz & Öz, 2021). Gamified quizzes encourage students to recall previously learned material in an enjoyable and less stressful environment. Furthermore, Kahoot's competitive element can reduce classroom anxiety by shifting focus from individual performance to collective participation (Zhang & Yu, 2021).

Despite these advantages, existing research primarily focuses on general language skills or formative assessment. Few studies examine Kahoot's potential in discourse learning, which involves analyzing textual structures, coherence, and contextual meaning. Discourse learning demands deeper analytical engagement than vocabulary memorization or grammar drills. Consequently, the pedagogical effectiveness of Kahoot in supporting discourse-level comprehension remains underexplored, particularly within Indonesian higher education contexts.

Student perception in technology-enhanced language learning

Student perception plays a crucial role in evaluating the effectiveness of educational innovations. Perception refers to the cognitive process through which individuals interpret experiences and assign meaning to instructional practices (Vernon, 2017). In educational settings, perception influences motivation, engagement, confidence, and learning outcomes. When students perceive instructional methods as meaningful and engaging, they are more likely to participate actively and demonstrate improved performance.

Research on technology-enhanced learning emphasizes the importance of examining students' affective and cognitive responses to digital tools (Guo, 2025). Positive perceptions of educational technology are associated with increased self-efficacy, intrinsic motivation, and academic satisfaction. Conversely, negative perceptions may reduce engagement and hinder effective technology integration.

Robbins and Judge (2019) categorize perception into three dimensions: self-perception, interpersonal perception, and situational perception. Self-perception involves how learners evaluate their abilities, confidence, and motivation. In gamified learning environments, self-perception may be reflected in students' perceived improvement in understanding or increased confidence in answering questions. Interpersonal perception relates to how students interpret peer interaction and collaboration during learning activities. Gamified platforms often promote peer engagement through competition and discussion. Situational perception concerns how students interpret the overall learning environment,

including classroom atmosphere, comfort, and instructional innovation.

Previous studies on Kahoot in Indonesian contexts have largely reported positive student responses (Permatasari et al., 2023; Rosdiana, 2019). However, many of these studies measure general satisfaction rather than analyzing perception through a structured theoretical framework. Furthermore, limited research has applied multidimensional perception constructs to examine gamification in university-level discourse learning.

Understanding students' perceptions in discourse learning is particularly important because discourse tasks require greater cognitive engagement. If students perceive gamified discourse learning as enjoyable yet superficial, it may not lead to a deep understanding. Conversely, if students perceive it as motivating and cognitively supportive, gamification may function as an effective pedagogical innovation.

Therefore, examining students' perceptions through a multidimensional framework provides a more comprehensive understanding of how Kahoot-based gamification influences the affective and cognitive dimensions of discourse learning in higher education.

Research Methodology

This study uses a descriptive, quantitative approach. Quantitative research is a scientific approach carried out systematically to examine various elements and symptoms, as well as causal relationships among them. This approach relies on collecting measurable data, which is then analyzed using statistical, mathematical, or other computational methods (Abdullah et al., 2022). According to Fiantika et al. (2020), research that presents symptoms, facts, or events related to the characteristics of a particular population or region is a descriptive study. Meanwhile, according to Abdullah et al. (2022), the aim is to describe and analyze students' perceptions of the use of the Kahoot application in learning Indonesian language discourse. This approach was chosen to obtain numerical data that can be analyzed statistically to identify trends in respondents' perceptions.

The subjects in this study were students in the Indonesian Language and Literature Education Study Program at Tridinanti University who had taken the Indonesian Language Discourse course. The total number of primary respondents was 20 sixth-semester students who had used the Kahoot application during their learning. The main data collection technique used in this study was a questionnaire (closed questionnaire) based on a Likert scale. A questionnaire is a data-collection tool that presents a set of written questions or statements for respondents to answer. The questionnaire is suitable for use when the number of respondents is quite large and spread over a wide area. The questionnaire used in this study is closed; that is, it has been prepared by the researcher and does not allow respondents to provide answers other than those provided (Saat & Mania, 2020). The initial questionnaire consisted of 20 questions, but after

Validity and reliability tests were conducted on 16 trial students; the final questionnaire included 14 items. Each statement item uses a 5-point Likert scale: SS = Strongly Agree, A = Agree, LA = Less Agree, D = Disagree, SD = Strongly Disagree. Data Validity Techniques: In this study, data validity is ensured through the following techniques: instrument validity is assessed through content validity and construct validity. Content validity ensures that the questionnaire covers all relevant domains to measure students' perceptions of learning using Kahoot. Construct validity ensures that the questionnaire measures the intended construct, namely perceptions of learning using the Kahoot application. 2. Instrument Reliability:

Instrument reliability refers to the extent to which the questionnaire is consistent in measuring the same variables at different times. In this study, reliability was measured using Cronbach's alpha. This coefficient measures the internal consistency of the questionnaire, indicating the extent to which its items are correlated with each other and the accuracy with which it measures students' perceptions. If the Cronbach's alpha is greater than 0.7, the instrument is considered reliable.

To ensure the quality of the research instrument, the researcher conducted a validity and reliability test on the questionnaire. The validity test was conducted using the Pearson Product-Moment correlation formula and compared with the r-table value at a significance level of 5% with a total of 16 respondents, yielding a value of 0.497. According to the calculation results, most questions had r-values greater than the r-table value, indicating that the items were valid. For example, item P3 had a calculated r-value of 0.6335, which was greater than 0.497, so it was declared valid. The items that were declared invalid included P1 (0.4941658 < 0.497) and P5 (0.4578118 < 0.497).

In addition to the validity test, a reliability test was also conducted to determine the instrument's consistency in measuring students' perceptions of learning using the Kahoot application. Based on the Cronbach's alpha calculation, the resulting alpha value was 0.8866. This value is well above the minimum reliability benchmark of 0.70, indicating that the instrument is reliable and can be trusted to measure student perceptions. The instrument consists of 20 question items (P1-P20) and was administered to 16 students, with a score per item ranging from 1 to 5. The total overall score of each

The respondent was also calculated and used to identify the diversity of responses. In addition, the bottom of the table displays the variance per item used to calculate reliability. The total variance for all items is 75.71667, and the variance per item is 11.941667.

Findings

A total of 21 sixth-semester students were invited to participate in this study; 20 students completed the questionnaire and were included in the analysis. All responses were anonymized to ensure participant confidentiality. The findings are presented according to Robbins and Judge's (2013) three-dimensional perception framework: self-perception, interpersonal perception, and situational perception.

Self-perception

Self-perception refers to how students evaluate their academic progress, confidence, motivation, and emotional engagement during Kahoot-based discourse learning.

Table 1. *Self-perception responses (n = 20)*

Item	Statement Summary	Percentage (%)
Q2	Learning outcomes improved	60%

Q4	More active in class	70%
Q5	More confident answering questions	60%
Q9	Motivated by Kahoot feedback	70%
Q13	Feel happy during learning	65%

Table 1 shows that most students reported positive self-perceptions when using Kahoot. The highest levels of agreement (70%) were observed in increased classroom activeness (Q4) and motivation driven by feedback (Q9). This indicates that Kahoot's interactive features and instant scoring mechanisms effectively stimulated participation and academic drive.

Perceived improvement in learning outcomes (Q2) and confidence (Q5) both reached 60%, suggesting moderate but meaningful academic benefits. Emotional enjoyment (Q13) was reported by 65% of respondents, indicating that Kahoot positively influenced students' learning mood. Overall, Table 1 shows that Kahoot primarily enhanced engagement and motivation, while perceived academic improvement varied moderately among students.

Interpersonal perception

Interpersonal perception examines how students interpret peer interaction and instructional dynamics during Kahoot-based learning.

Table 2. *Interpersonal perception responses (n = 20)*

Item	Statement Summary	Agree + Strongly Agree (%)
Q6	Encouraged peer discussion	55%
Q12	Recommend to other lecturers	54%

Table 2 indicates comparatively lower agreement levels in interpersonal perception. Only 55% of students agreed that Kahoot encouraged discussion, while 54% would recommend its use to other lecturers.

These findings suggest moderate endorsement of Kahoot's collaborative potential. While more than half of the respondents perceived some interpersonal benefit, a substantial proportion did not strongly associate Kahoot with enhanced peer interaction. This dimension recorded the lowest agreement levels among the three perception categories.

Situational perception

Situational perception refers to how students evaluate the learning environment created by Kahoot, including classroom atmosphere, usability, innovation, and satisfaction.

Table 3. ***Situational perception responses (n = 20)***

Item	Statement Summary	Agree + Strongly Agree (%)
Q1	Helped recall material	65%

Q3	Created an enjoyable atmosphere	70%
Q7	Easy to use	70%
Q8	Comfortable online/offline	69%
Q10	Effective innovation	85%
Q11	Should be applied in other courses	54%
Q14	Overall satisfaction	60%

Table 3 reveals that situational perception received the strongest positive responses. The highest agreement (85%) was found in the perception of Kahoot as an effective innovation (Q10). This indicates strong recognition of Kahoot as a modern instructional strategy. Classroom atmosphere (Q3) and ease of use (Q7) both reached 70%, demonstrating that Kahoot significantly enhanced classroom dynamics and technological accessibility. Material recall (Q1) and comfort across various learning modes (Q8) also showed strong agreement.

However, agreement declined to 54% when students were asked whether Kahoot should be continuously implemented in other courses (Q11). This suggests cautious acceptance regarding broader application. Overall satisfaction (Q14) reached 60%, indicating generally positive but not unanimous approval.

Comparative analysis across perception dimensions

To provide a clearer comparison, the average agreement percentage for each dimension was calculated.

Table 4. *Average agreement by perception dimension*

Dimension	Average Agreement (%)
Self-Perception	65%
Interpersonal Perception	54.5%
Situational Perception	67.6%

Table 4 shows that situational perception recorded the highest overall agreement (67.6%), followed closely by self-perception (65%). Interpersonal perception obtained the lowest average agreement (54.5%). This pattern indicates that Kahoot was primarily perceived as improving classroom atmosphere and engagement (situational factors), while its influence on peer collaboration was comparatively weaker.

Discussions

The findings of this study indicate that Kahoot-based gamification in Indonesian discourse learning generated predominantly positive student perceptions across three dimensions: self-perception, interpersonal perception, and situational perception. However, the strength of perception varied across dimensions, with situational perception recording the highest agreement, followed by self-perception, and interpersonal perception showing comparatively lower support. These findings align with contemporary research suggesting that gamification primarily enhances classroom atmosphere and student engagement, while

its collaborative impact may depend on instructional design (Wang & Tahir, 2020; Zainuddin et al., 2020).

Kahoot and self-perception: motivation, confidence, and engagement

The self-perception dimension revealed that most students experienced increased activeness (70%), improved motivation (70%), and enhanced confidence (60%) when using Kahoot. These findings support prior research indicating that gamified environments stimulate intrinsic motivation through real-time feedback and competitive elements (Subhash & Cudney, 2018; Toda et al., 2019). The feedback mechanism embedded in Kahoot appears to reinforce self-regulated learning by providing immediate performance indicators, which can enhance students' awareness of their academic progress.

The positive response regarding classroom activeness is consistent with Bond et al. (2020), who argue that digital tools increase behavioral engagement by encouraging participation in low-risk environments. Kahoot reduces the psychological pressure often associated with traditional oral questioning, allowing students to respond anonymously and confidently. This aligns with research by Licorish et al. (2018), which found that Kahoot reduces performance anxiety and fosters a more inclusive participation dynamic.

However, while motivation and engagement were strong, perceived improvement in learning outcomes reached only 60%. This moderate result suggests that although Kahoot enhances engagement, it may not automatically guarantee deep conceptual mastery. This finding resonates with studies by Zhang and Yu (2021), which emphasize that gamification improves short-term engagement but requires structured pedagogical integration to support higher-order cognitive development.

In the context of discourse learning—which involves analytical reasoning, coherence evaluation, and contextual interpretation—the use of Kahoot may be more effective as a reinforcement tool rather than a primary instructional strategy. Gamified quizzes can stimulate recall and participation, but deeper discourse analysis likely requires complementary reflective discussion and analytical exercises (Khalil & Elkhider, 2020).

Interpersonal perception: limited collaborative impact

Interpersonal perception recorded the lowest agreement levels (approximately 54–55%), particularly regarding peer discussion and recommendation for broader instructional use. This finding suggests that Kahoot's competitive format does not automatically translate into enhanced collaboration. Previous research indicates that gamification fosters engagement primarily at the individual level rather than collaborative interaction (Toda et al., 2019). While Kahoot promotes simultaneous participation, its time-bound and competitive nature may limit opportunities for extended peer dialogue. Wang and Tahir (2020) note that Kahoot is most effective in promoting attention and excitement but less effective in facilitating deep collaborative discourse unless combined with structured discussion activities.

The moderate endorsement of recommending Kahoot to other lecturers also reflects cautious optimism. Students may perceive Kahoot as suitable for certain subjects—such as review sessions or concept reinforcement—but not necessarily for all academic contexts. This finding aligns with Zainuddin et al. (2020), who found that gamification success

depends on subject complexity and instructional alignment.

In discourse learning, where collaborative interpretation and critical reasoning are essential, Kahoot alone may not fully support interpersonal engagement. Therefore, lecturers should consider integrating Kahoot with group analysis tasks or reflective discussion to maximize collaborative learning outcomes.

Situational perception: Strongest positive response

Situational perception demonstrated the strongest positive response (average 67.6%), particularly in recognizing Kahoot as an effective innovation (85%) and in improving classroom atmosphere (70%). These findings strongly support existing literature emphasizing gamification's role in transforming classroom dynamics (Bond et al., 2020; Toda et al., 2019).

The high level of agreement regarding Kahoot as an instructional innovation reflects students' receptiveness to digital transformation in higher education. Following the acceleration of digital learning adoption after the COVID-19 pandemic, students increasingly expect technology-enhanced instruction (Rahayu & Wirza, 2020). Kahoot's user-friendly interface and accessibility likely contributed to its strong situational acceptance.

Ease of use (70%) and comfort in both online and offline contexts (69%) further confirm Kahoot's technological adaptability. These results align with those of Wang and Tahir (2020), who found that usability significantly influences positive student perceptions in gamified environments.

However, while 85% recognized Kahoot as innovative, only 54% supported its continuous implementation in other courses. This gap suggests that students distinguish between appreciating innovation and endorsing universal application. Toda et al. (2019) indicates that excessive gamification may reduce novelty effects over time, potentially diminishing motivational impact. Thus, Kahoot appears most effective when implemented strategically rather than routinely. Maintaining its novelty and aligning it with course objectives are crucial to sustaining positive situational perception.

Using Robbins and Judge's perception framework provides helpful insights into how students interpret gamified learning experiences. Self-perception findings demonstrate that Kahoot enhances individual engagement and motivation. Situational perception highlights the importance of classroom environments and instructional innovation. Meanwhile, interpersonal perception results suggest that collaboration requires more intentional pedagogical structuring.

These multidimensional findings reinforce the argument that technology alone does not determine learning effectiveness; rather, perception mediates how students experience and interpret digital tools (Hu & Hui, 2012). Positive situational perception can enhance emotional engagement, which may, in turn, indirectly influence motivation and participation.

The findings suggest several implications for higher education practice. First, Kahoot should be integrated as a complementary tool to reinforce discourse concepts rather than replace analytical discussion. Second, lecturers should incorporate post-quiz discussion sessions to strengthen collaborative interaction. Third, balanced implementation is necessary to maintain novelty and prevent overreliance on gamification.

For discourse learning specifically, Kahoot can be effective for reviewing textual structures, identifying cohesive devices, or reinforcing theoretical definitions. However,

deeper interpretive tasks should involve reflective and dialogical approaches to develop critical literacy skills fully.

In summary, this study demonstrates that Kahoot-based gamification in Indonesian discourse learning positively influences students' perceptions, particularly the classroom atmosphere and individual engagement. While motivation and innovation are strongly perceived, collaborative impact remains moderate. These findings confirm that gamification enhances situational and motivational aspects of learning but requires careful instructional design to support higher-order discourse competencies.

Future research should use larger sample sizes and employ inferential statistical analysis to examine causal relationships between perceptions and academic achievement. Additionally, qualitative investigation may offer greater clarity about how students experience gamified discourse learning beyond quantitative perception measures.

Conclusion

Based on the research results, it can be concluded that, overall, Tridinanti University students have a positive perception of the use of the Kahoot application for learning Indonesian discourse. Most students feel that using Kahoot helps them understand and recall the material. Furthermore, using this application increases learning motivation, encourages active participation, and creates a more enjoyable, less boring classroom atmosphere. Perceptions of themselves (self-perceptions), others (interpersonal perceptions), and learning situations (perceptions of situations) all tend to support the usefulness of Kahoot as an innovative learning medium.

Furthermore, students also found the Kahoot interface easy to use for both online and offline learning. They felt comfortable and motivated to improve their learning outcomes, thanks to the app's direct feedback. Student support for the continued use of Kahoot in other courses and recommendations to other lecturers indicate that the app is not only personally accepted but also worthy of broader implementation in higher education.

Recommendations

Based on research on students' perceptions of learning Indonesian language discourse using the Kahoot application, the researchers recommend that lecturers and educational administrators consider implementing interactive applications such as Kahoot more widely in the learning process. The use of Kahoot has been shown to significantly improve students' understanding, motivation, and participation, and to create a more enjoyable, less boring learning environment.

Furthermore, lecturers are advised to use Kahoot not only as an evaluation tool but also to integrate it into discussions, reflections on material, and regular conceptual understanding exercises. Educational institutions are also expected to provide training or workshops for teaching staff on the use of innovative digital learning applications. Future researchers should conduct additional studies with larger samples and compare the efficacy of Kahoot with other interactive learning methods to achieve a more thorough understanding of the impact of digital media on learning quality in higher education.

Disclosure Statement

No potential conflict of interest was reported by the authors.

References

Abdullah, M., Fitriana, N., & Rahman, A. (2022). *Research methodology in education: Quantitative and qualitative approaches*. Jakarta: EduPress.

Bond, M., Bedenlier, S., Marín, V. I., & Händel, M. (2020). Emergency remote teaching in higher education: Mapping the first global online semester. *International Journal of Educational Technology in Higher Education, 17*(1), 1–24.

Dehganzadeh, H., & Dehganzadeh, H. (2020). Investigating effects of digital gamification-based language learning: A systematic review. *Journal of English Language Teaching and Learning*, *12*(25), 53-93.

Farhane, H. (2025). An investigation of the effect of Kahoot on vocabulary retention among Moroccan EFL secondary school students: A quasi-experimental study. *Journal of English Language Teaching and Applied Linguistics*, *7*(3), 242-257.

Fiantika, F. R., Wasil, M., Jumiyati, S., Honesti, L., Wahyuni, S., Mouw, E., & Umanailo, M. C. B. (2020). *Metodologi penelitian kualitatif (Qualitative research methodology)*. Padang: Global Eksekutif Teknologi.

Guo, J., & An, F. (2025). Exploring the impact of cognitive and affective components within the attitude construct on students' deep approach to learning in technology-enhanced learning. *Current Psychology*, *44*(11), 10899-10914.

Hu, P. J. H., & Hui, W. (2012). Examining the role of learning engagement in technology-mediated learning and its effects on learning effectiveness and satisfaction. *Decision Support Systems*, *53*(4), 782-792.

Inggriyani, F., & Putri, D. (2025). Gamification in teacher education: Enhancing engagement through digital platforms. *Journal of Educational Innovation, 9*(2), 145–158.

Khalil, M. K., & Elkhider, I. A. (2020). Applying learning theories and instructional design models for effective instruction. *Advances in Physiology Education, 40*(2), 147–156.

Korkmaz, S., & Öz, H. (2021). Using Kahoot to improve reading comprehension of English as a foreign language learners. *International Online Journal of Education and Teaching*, *8*(2), 1138-1150.

Licorish, S. A., Owen, H. E., Daniel, B., & George, J. L. (2018). Students' perception of Kahoot!'s influence on teaching and learning. *Research and Practice in Technology Enhanced Learning, 13*(9), 1–23.

Morel, G. M., & Spector, J. M. (2022). *Foundations of educational technology: Integrative approaches and interdisciplinary perspectives*. Routledge.

Perdana, R., Suryani, N., & Kurniawan, D. (2020). Gamification in prospective teacher education: Improving classroom engagement through digital quizzes. *Jurnal Pendidikan dan Pengajaran (Journal of Education and Teaching), 53*(3), 201–210.

Permatasari, R., Hidayat, T., & Lestari, S. (2023). Students' attitudes toward Kahoot as an online assessment tool in higher education. *Indonesian Journal of Educational Technology, 5*(1), 32–45.

Rahayu, A., & Wirza, Y. (2020). Teachers' perception of online learning during the COVID-19 pandemic in Indonesia. *Journal of English Education and Teaching, 4*(3), 392–406.

Robbins, S. P., & Judge, T. A. (2019). *Organizational behavior*. Pearson Education.

Rosdiana, L. (2019). The use of Kahoot to improve student engagement in EFL classroom. *Journal of Language Teaching and Research, 10*(5), 1032–1038.

Saat, S., & Mania, S. (2020). *Metodologi penelitian: Panduan praktis untuk penelitian kuantitatif dan kualitatif (Research methodology: A practical guide for quantitative and qualitative research)*. Makassar: Pustaka Almaida.

Shokirovna, T. L. (2023). Cognitive processes: perception and sensation. *International Journal of Social Science & Interdisciplinary Research*, *12*(03), 108-110.

Subhash, S., & Cudney, E. A. (2018). Gamified learning in higher education: A systematic review. *Computers in Human Behavior, 87*(4), 192–206.

Toda, A. M., Valle, P. H., & Isotani, S. (2019). The dark side of gamification: An overview of negative effects of gamification in education. *Communications in Computer and Information Science, 832*, 143–156.

Vernon, M. D. (2017). *Perception through experience*. Routledge.

Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning: A literature review. *Computers & Education, 149*(6), 103818.

Yustinah, Y., & Hartono, R. (2023). Developing academic literacy through discourse analysis in Indonesian higher education. *Indonesian Journal of Applied Linguistics, 12*(2), 210–222.

Zainuddin, Z., Chu, S. K. W., Shujahat, M., & Perera, C. J. (2020). The impact of gamification on learning and instruction: A systematic review of empirical evidence. *Educational Research Review, 30*, 100326.

Zhang, Q., & Yu, Z. (2021). The impact of gamified learning on student engagement and academic performance. *Interactive Learning Environments, 29*(6), 905–917.